

AMENDMENTS TO THE CLAIMS:

The below listing of claims will replace all prior versions and listings of claims in the application. Applicant has added new claims 97-99 in this paper.

LISTING OF CLAIMS:

1. (Previously presented) A versatile wrist support comprising:
a molded plastic exostructure supplying support for resisting motion of said wrist;
an inner fabric support directly molded to said molded exostructure for providing cushioning to the wrist area;

a separate, attachable thumb spica member for optionally configuring the wrist support to include a thumb spica;

wherein the wrist support has one mode in which the support has no thumb spica, and a second mode in which the support has a thumb spica.

2. (Original) A versatile wrist support as defined in claim 1, wherein said thumb spica member is attached to said support in said second mode by a method selected from the group constituting ultrasonic welding, snaps, hook-and-loop material, rivets or an adhesive.

3. (Original) A versatile wrist support as defined in claim 1, wherein said thumb spica member comprises a thumb retention strap.

4. (Original) A versatile wrist support as defined in claim 3, wherein said thumb retention strap comprises hook-and-loop material.

5. (Original) A versatile wrist support as defined in claim 1, wherein said thumb spica member comprises a molded outer exostructure and a softgoods lining in said exostructure.

6. (Original) A versatile wrist support as defined in claim 1, wherein said plastic exostructure comprises a forearm portion and a thumb portion, and said thumb

spica member comprises a thumb supporting structure and a stay portion that attaches to said forearm portion of said exostructure.

7. (Original) A versatile wrist support as defined in claim 1, wherein said plastic exostructure includes a web-receiving area and a thumb aperture, said thumb spica member being adapted to attach to said plastic exostructure about said thumb aperture.

8. (Original) A versatile wrist support as defined in claim 1, wherein said exo-structure comprises plastics of different densities.

9. (Original) A versatile wrist support as defined in claim 1, wherein the thickness of said exo-structure is non-uniform to provide different levels of support at different points on the support.

10. (Original) A versatile wrist support as defined in claim 1, wherein said molded plastic exostructure comprises first and second separate pieces.

11. (Original) A versatile wrist support as defined in claim 10, wherein said first and second separate pieces are attached to one another by a method selected from the group constituting ultrasonic welding, snaps, hook-and-loop material, rivets or an adhesive.

12. (Original) A versatile wrist support as defined in claim 1, wherein said thumb spica has snaps and wherein said spica member attaches to said support in said second mode with said snaps.

13. (Original) A versatile wrist support as defined in claim 1, wherein the inner fabric support is attached to the molded exostructure by directly molding the exostructure onto the inner fabric support within a mold.

14. (Original) A versatile wrist support as defined in claim 1, wherein the support has a carpal tunnel pressure relief opening.

15. (Original) A versatile wrist support as defined in claim 1, wherein the support has a thumb aperture and comprises an overmold about the thumb aperture.

16. (Previously presented) A versatile wrist support comprising:
a molded plastic exostructure supplying support for resisting motion of said wrist;
an inner fabric support directly molded to said molded exostructure for providing cushioning to the wrist area;

a separate, attachable stay for optional attachment to said molded exostructure to provide additional rigidity to said exostructure;

wherein the wrist support has a first relatively flexible mode in which the attachable stay is not attached to the wrist support, and a second relatively stiff mode in which the attachable stay is attached to the wrist support.

17. (Original) A versatile wrist support as defined in claim 16, wherein said stay is formed from the group of materials constituting aluminum, steel and molded plastic.

18. (Original) A versatile wrist support as defined in claim 16, wherein said stay is a bendable aluminum stay.

19. (Original) A versatile wrist support as defined in claim 18, wherein said support has a third mode in which said aluminum stay has been bent after attachment to the support in order to alter the shape of the support.

20. (Original) A versatile wrist support as defined in claim 19, wherein said support includes a molded recess for receiving said stay.

21. (Original) A versatile wrist support as defined in claim 16, wherein said stay snaps onto said molded exostructure.

22. (Original) A versatile wrist support as defined in claim 16, wherein said stay is attached to said molded plastic exostructure by a method selected from the group

constituting ultrasonic welding, snaps, snap fitting hook-and-loop material, rivets or an adhesive.

23. (Original) A versatile wrist support as defined in claim 16, wherein said exo-structure comprises plastics of different densities.

24. (Original) A versatile wrist support as defined in claim 16, wherein the thickness of said exostructure is non-uniform to provide different levels of support at different points on the support.

25. (Original) A versatile wrist support as defined in claim 16, wherein said stay is a dorsal stay.

26. (Original) A versatile wrist support as defined in claim 25, wherein said wrist support has a thumbhole.

27. (Original) A versatile wrist support as defined in claim 16, wherein said stay is a palmer stay.

28. (Original) A versatile wrist support as defined in claim 27, wherein said wrist support has a thumbhole.

29. (Original) A versatile wrist support as defined in claim 16, wherein said molded plastic exostructure comprises first and second separate pieces.

30. (Original) A versatile wrist support as defined in claim 29, wherein said first and second separate pieces are attached to one another by a method selected from the group constituting ultrasonic welding, snaps, hook-and-loop material, rivets or an adhesive.

31. (Previously presented) A versatile wrist support as defined in claim 16, wherein the inner fabric support is attached to the molded exostructure by directly molding the exostructure onto the inner fabric support within a mold in a single step.

32. (Original) A versatile wrist support as defined in claim 16, wherein the support has a carpal tunnel pressure relief opening.

33. (Original) A versatile wrist support as defined in claim 16, wherein the support has a thumb aperture and comprises an overmold about the thumb aperture.

34. (Previously presented) A versatile wrist support comprising:
a molded plastic exostructure supplying support for resisting motion of said wrist;
said molded plastic exostructure comprising a hinged web portion that is adapted to extend across the web of a hand wherein an axis of rotation of said hinge is not coplanar with said molded plastic exostructure; and
a padded, flexible member extending about at least a portion of said web portion to provide cushioning for the web of the hand.

35. (Original) A versatile wrist support as defined in claim 34, wherein said molded plastic exostructure includes a molded recessed area for receiving said padded member.

36. (Original) A versatile wrist support as defined in claim 34, wherein said exo-structure comprises plastics of different densities.

37. (Original) A versatile wrist support as defined in claim 34, wherein the thickness of said exostructure is non-uniform to provide different levels of support at different points on the support.

38. (Original) A versatile wrist support as defined in claim 34, wherein said molded plastic exostructure comprises first and second separate pieces.

39. (Original) A versatile wrist support as defined in claim 38, wherein said first and second separate pieces are attached to one another by a method selected from the group constituting ultrasonic welding, snaps, hook-and-loop material, rivets or an adhesive.

40. (Original) A versatile wrist support as defined in claim 34, wherein the wrist support has a palm portion, with an overmold on at least part of the palm portion.

41. (Original) A versatile wrist support as defined in claim 34, wherein said web portion comprises fabric onto which plastic has been molded.

42. (Original) A versatile wrist support as defined in claim 34, wherein said padded flexible member is attached to said exostructure by a method selected from the group constituting ultrasonic welding, a snap, hook-and-loop material, a hook, a rivet, and an adhesive.

43. (Previously presented) A versatile wrist support as defined in claim 34, wherein the inner fabric support is attached to the molded exostructure by directly molding the exostructure onto the inner fabric support in a single molding operation without use of an adhesive or a fastener.

44. (Original) A versatile wrist support as defined in claim 34, wherein the support has a carpal tunnel pressure relief opening.

45. (Original) A versatile wrist support as defined in claim 35, wherein the support has a thumb aperture and comprises an overmold about the thumb aperture.

46. (Canceled).

47. (Previously presented) An adjustable wrist support comprising:
a molded plastic exostructure supplying support for resisting motion of said wrist;
an inner cushion directly molded to said molded exostructure for providing cushioning to the wrist area;

said exostructure having a forearm portion and a hand portion, said forearm portion including an adjustable radial forearm strap, wherein the forearm portion may be adjusted to fit the forearms of a variety of different users.

48. (Original) An adjustable wrist support as defined in claim 47, wherein said adjustable radial forearm strap comprises a strap having hook-and-loop material.

49. (Original) An adjustable wrist support as defined in claim 47, wherein said adjustable radial forearm strap comprises a first and second strap, said first strap having a plurality of posts and said second strap having a plurality of holes to receive said posts.

50. (Original) An adjustable wrist support as defined in claim 47, wherein said support comprises a closure strap secured to said exostructure and a clip adjustably secured to said strap, said clip having an aperture, said exostructure having a hook to which said clip secures.

51. (Original) A versatile wrist support as defined in claim 47, wherein said exo-structure comprises plastics of different densities.

52. (Original) A versatile wrist support as defined in claim 47, wherein the thickness of said exo-structure is non-uniform to provide different levels of support at different points on the support.

53. (Original) A versatile wrist support as defined in claim 47, wherein said molded plastic exostructure comprises first and second separate pieces.

54. (Original) A versatile wrist support as defined in claim 53, wherein said first and second separate pieces are attached to one another by a method selected from the group constituting ultrasonic welding, snaps, hook-and-loop material, rivets or an adhesive.

55. (Original) A versatile wrist support as defined in claim 47, wherein the wrist support has a palm portion, with an overmold on at least part of the exterior of the palm portion.

56 - 59. (Canceled)

60. (Previously presented) A wrist support comprising:
a molded plastic exostructure supplying support for resisting motion of said wrist;
said molded plastic exostructure comprising an ergonomically contoured web
portion that is hinged and adapted to extend across the web of a hand, said contoured web
portion partially defining a thumb opening wherein an axis of rotation of said hinge is not
co-planar with said molded plastic exostructure.

61. (Original) A wrist support comprising as defined in claim 60 further
comprising a padded, flexible member extending about at least a portion of said web
portion to provide cushioning for the web of the hand.

62. (Original) A wrist support as defined in claim 60, wherein said molded
plastic exostructure includes a molded recessed area for receiving said padded member.

63. (Original) A versatile wrist support as defined in claim 60, wherein said
exostructure comprises plastics of different densities.

64. (Original) A versatile wrist support as defined in claim 60, wherein the
thickness of said exostructure is non-uniform to provide different levels of support at
different points on the support.

65. (Original) A versatile wrist support as defined in claim 60, wherein said
molded plastic exostructure comprises first and second separate pieces.

66. (Original) A versatile wrist support as defined in claim 60, wherein said
first and second separate pieces are attached to one another by a method selected from the
group constituting ultrasonic welding, snaps, hook-and-loop material, rivets or an
adhesive.

67. (Canceled).

68. (Original) A wrist support as defined in claim 60 wherein said support is a volar splint.

69. (Original) A wrist support as defined in claim 60 wherein said support is a dorsal splint.

70 - 76. (Canceled)

77. (Previously presented) A versatile wrist support comprising:
a molded plastic exostructure adapted to at least partially surround a portion of the anatomy, the exostructure supplying support for resisting motion of a wrist;
an inner flexible member directly molded to said molded exostructure for providing cushioning to the wrist area;
wherein the thickness of said exo-structure is non-uniform to provide different levels of support at different points on the support.

78. (Previously presented) A versatile wrist support as defined in claim 77, wherein the inner flexible member is attached to the molded exostructure by directly molding the exostructure onto the inner fabric support within a mold in one step.

79. (Original) A versatile wrist support as defined in claim 77, wherein the support has a carpal tunnel pressure relief opening.

80. (Original) A versatile wrist support as defined in claim 77, wherein the support has a thumb aperture and comprises an overmold about the thumb aperture.

81. (Original) A versatile wrist support as defined in claim 77, wherein the wrist support has a palm portion with an overmold on at least part of the palm portion.

82 - 83. (Canceled)

84. (Previously presented) A versatile wrist support comprising:
a molded plastic exostructure supplying support for resisting motion of said wrist;

said molded plastic exostructure comprising a hinged web portion that is adapted to extend across the web of a hand, wherein an axis of rotation of said hinge is not coplanar with said molded plastic exostructure; and

said web portion comprising a flexible fabric that has been molded/secured into place on the exostructure.

85. (Previously presented) A wrist support having volar and dorsal plates, the wrist support comprising:

a volar plate and a dorsal plate;

a flexible and hinged web portion that is adapted to extend across the web of a user's hand wherein an axis of rotation of said hinge is not coplanar with said volar plate, said flexible web portion extending between said volar plate and said dorsal plate.

86. (Original) A wrist support as defined in claim 85, wherein said flexible portion is pivotally attached at an end of the web portion to at least one of said volar plate and said dorsal plate.

87. (Original) A wrist support as defined in claim 85, wherein said flexible web portion is an integral part of one of said volar plate and said dorsal plate, and is attached to the other of said volar plate and said dorsal plate.

88. (Original) A wrist support as defined in claim 85, wherein said web portion is joined to said volar plate and said dorsal plate with generally "S"-shaped connectors.

89. (Original) A wrist support as defined in claim 85, wherein a generally "S"-shaped connector joins said volar and said dorsal plates.

90. (Original) A wrist support as defined in claim 85, wherein said flexible web portion maintains said volar and said dorsal plates at a set distance from one another.

91. (Previously presented) A wrist support comprising:
a molded plastic exostructure supplying support for resisting motion of said wrist;
said molded plastic exostructure having edges which contact the skin of a user's
hand during digital motion;

a soft and flexible web portion attached by a hinge to said molded plastic
exostructure wherein an axis of said hinge is not co-planar with the molded plastic
exostructure; and

a softer plastic molded over said edges to increase comfort.

92. (Previously presented) A versatile wrist support as defined in claim 34
further comprising a thumb spica for mounting to said wrist support for providing
additional support for the thumb.

93. (Previously presented) A versatile wrist support as defined in claim 34
further comprising a stay for mounting on said exostructure to provide additional support.

94. (Previously presented) A versatile wrist support as defined in claim 34
further comprising straps for holding the support onto the user.

95. (Previously presented) A versatile wrist support as defined in claim 34
wherein said exostructure is of non-uniform thickness.

96. (Canceled)

97. (New) A versatile wrist support comprising:
a molded plastic exostructure supplying support for resisting motion of said wrist;
an inner fabric support disposed on said molded exostructure for providing
cushioning to the wrist area;

a separate, attachable thumb spica member having cylindrical shape, completely
circumscribing a patient's thumb and having a rigid wall; and

a mechanical lock joining the thumb spica to at least one of the inner fabric
support and molded plastic exostructure.

98. (New) A versatile wrist support as defined in claim 97, wherein the mechanical lock includes a hook and the molded plastic exostructure includes a thumb opening with a rigid rim receiving the hook.

99. (New) A versatile wrist support as defined in claim 97, wherein the thumb spica includes an elongated rigid body at least extending from the base of the patient's thumb to the first knuckle.